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Japan as Capital Exporter and the World Economy

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Japan as Capital Exporter and the World Economy

I. Introduction

Japan's changing position in the international financial system has not received as much attention as its role in the trading system. But the Japanese economy has emerged as a large-scale exporter of capital and savings based on its chronic current account surplus, and this new role is growing.

This paper will examine how the Japanese economy has become a natural international creditor through the evolution of its balance of payments (Section II), reflecting changes in the sectoral savings-investment imbalances of the domestic economy. The unique character of the sectoral savings-investment imbalances in Japan is the coexistence of the high-employment government deficit and the high-employment current account surplus in the 1970s and early 1980s (Section III). Despite huge oil deficits in the current account after both oil shocks, the Japanese economy restored its international creditor position, which had first appeared in the second-half of the 1960s, and demonstrated the persistence of the current account surplus (Section IV). The continued high-government deficit has produced mounting domestic pressures for liberalization of the Japanese financial market, particularly in the area of interest rates (Section V). Consequently, the Japanese financial system has been shifting from the bank-credit-control paradigm, which characterized the financial system during the high growth period of the 1950s and 1960s,

toward the open money market paradigm in which hitherto regulated issue rates in the primary security market, including long-term government securities and Treasury bills as well as bank deposit rates, will be liberalized.

As a natural result of being a large-scale exporter of capital, Japan should allow non-residents as well as residents to participate freely in financial transactions in the domestic financial market, the foreign exchange market and the euro-yen market, facilitating the internationalization of the yen. The report by the Yen-Dollar Committee between the United States and Japan concentrated on the liberalization of the euro-yen market (Section VII).

Under the changing circumstances, policymakers in Japan will face new problems. Notably, they will have to find new devices to cope with trade frictions, though the current account surplus cannot be eliminated by its nature. Monetary authorities will also face difficulty in controlling the money supply during the transition from the bank-credit-control system to the open money market system. Furthermore, they will find it difficult to maintain independent interest rate policies as the domestic financial market is fully integrated with world capital markets (Section VIII).

II. The evolution of Japan's balance of payments

The Japanese economy has rather quickly experienced three stages in the evolution of its balance of payments since World War II: first, it was an immature debtor country with current account deficits (1945-64, Stage I); then it became a mature debtor country with current-account surpluses, but still with *net payments* of investment income (1965-71, Stage II); and finally, now, it can be characterized as an immature creditor country with current-account surpluses, together with *net receipts* of investment income (1972-present, Stage III). In other words, in Stage I, which lasted twenty years, the Japanese economy was an international borrower in both flow and stock terms. In Stage II, which was a relatively short period, it became an international lender but only in flow terms. Finally in Stage III, it has become an international creditor in both flow and stock terms (Table 1). If the present Stage III is to be followed by another stage, Japan will graduate to mature creditor country status, in which net receipts of investment income will more than offset deficits in other current account items, including trade deficits, with the overall current account in surplus. It may take quite long, however, before the Japanese economy can truly be called a mature creditor country.

These changes in the pattern of the balance of payments went hand-in-hand with the development of the export sector and the domestic industrial structure. During Stage I (1945-64), Japan's comparative

advantage lay in labor-intensive commodities (e.g., textiles), but with an increasing share of non-sophisticated electrical appliances (e.g., transitor radios, and black-white TV sets) and vessels. In Stage II (1965-71), capital-intensive commodities (e.g., iron and steel, and petrochemicals) became Japan's comparative advantage goods, together with an increasing share of medium knowledge-intensive consumer durable goods (e.g., color TV sets and passenger cars). In Stage III (1972-present), high knowledge-intensive goods (e.g., NC machinery, large-scale plants, and integrated circuits) have been increasingly important comparative advantage commodities.

These dynamic changes in the industries with a comparative advantage and the evolution of the balance of payments also largely coincided with the process of the liberalization of import restrictions and of foreign exchange controls.

Stage I included the high growth period, when the Japanese economy was protected by both import restrictions and strict foreign exchange controls. Imports were restricted in order to promote the then infant industries (e.g., shipbuilding, iron and steel, and automobiles), while foreign exchange controls were exercised to prevent net capital outflows in order for domestic savings to be bottled up for high domestic investment under the "low" interest rate financial policy. Reflecting the balance of payments development, however, Japan became an Article 8 member of the IMF and joined the OECD at the end of Stage I (1964). The number of commodities subject to import quotas accounted for 59 percent of total import items in April 1960, but such proportion was reduced to 7 percent in 1964.

In Stage II, the number of industrial goods subject to import quotas declined from 55 items in 1965 down to 8 items in 1972 (5 items in 1983), while agricultural commodities under import quota declined from 67 items to 24 items during the same period (22 items in 1983). Liberalization of foreign direct investment into Japan also started in 1967 and 100 percent liberalization was realized in 1973. All in all, Stage II was a transitional period from Stage I protected by strict import restrictions and foreign exchange controls toward Stage III where such regulations are decontrolled to the international average levels of advanced countries. Throughout Stages I and II, the financial system in Japan was a bank credit-control paradigm in which domestic credits were rationed by the Bank of Japan under the low interest rate policy, as will be discussed later.

Stage III is characterized both by the floating exchange rate regime and two oil crises in 1973-74 and 1978-80. As Stage III proceeded, international portfolio investments by residents and non-residents became

substantially liberalized. In December 1980, the *de facto* liberalization of foreign exchange controls which had made progress in the course of Stage III was recognized by the *de jure* introduction of a new foreign exchange act. The liberalization and internationalization of the Japanese financial market have advanced greatly, contributing to the transformation of the Japanese financial system as will be discussed in Section IV. In the early 1980s, Japan's tariff barriers became the lowest among advanced countries (from 13.8 percent in 1972 to 4.3 percent in 1981), while the import items subject to import quotas are 27 (5 for industrial and 22 for agricultural goods), more or less equivalent to the average of other advanced countries if we include other forms of formal import restrictions such as bilateral trade barriers, GATT waiver clause, and voluntary import restrictions exercised by other advanced countries.

In short, the three stages of the evolution of the balance-of-payments pattern in Japan have largely coincided with, first, the dynamic development of its comparative advantage goods; second, the liberalization of import restrictions and foreign exchange controls, and third, the gradual transformation of the Japanese financial system from a bank credit-control paradigm toward a market-determining open money market paradigm.

III. The nature of Japan's persistent current account surpluses

In Stage II, under the adjustable peg exchange rate system, Japan's current account surplus accounted for a rather stable share of nominal GNP -- around 1.5 percent on average — except for the last phase (1971-72) of the Bretton Woods system, when the yen became unrealistically undervalued.

In Stage III, Japan's current account has registered both deficits and surpluses under the floating exchange rate regime. This is attributable to the two oil crises. Table 1 shows that in 1974-75 under OPEC I and also in 1979-80 under OPEC II the current account was in deficit. But the table also shows more importantly that in both the post-OPEC I period (1976-78) and the post-OPEC II period (1981 to date) large surpluses persistently appeared in the current account. The oil crisis induced-deficits were more than offset by these post-OPEC surpluses, but the cumulative current account surplus was only 0.3 percent of cumulative GNP for 1973-82. This surprisingly small cumulative surplus indicates that total domestic savings were more or less equal to total domestic investments at current prices during the period 1973-82, and that the criticism that the excess of total domestic savings over investment found an outlet in foreign countries in the form of large net exports does not hold true for Stage III, as

long as such criticism is based on domestic investment-savings balance or net exports at current prices (i.e., in nominal terms).

Two questions then arise: First, what accounts for the underlying current account surplus which emerged since the middle of the 1960s? Second, what is the mechanism for restoring a once-obtained international creditor position even after the two oil crises which caused huge oil deficits in the current account? How should we interpret the restoration of the current account surplus after each oil crisis?

Generally speaking, a major cause of persistent current account imbalances lie in international differences in the marginal productivity of capital due to differences in technology, industrial mix, and endowments of capital. If this is the case, a rising domestic investment ratio to GNP tends to result in current account deficits. In fact, total fixed capital formation, including public works expenditure and residential construction, increased from 20.4 percent of nominal GNP in 1952 up to 31.5 percent in 1967. And during this stage I, Japan registered current account deficits, as mentioned earlier.

In the next period, 1968-73, the ratio of total fixed capital formation to nominal GNP remained at a high plateau of 33-36 percent, while the propensity to save in the household sector increased from 18 percent to 21 percent during the same period. These behaviors of both domestic investment and savings were consistent with the emergence of the current account surplus during Stage II.

In Stage III, the sectoral investment-savings (I-S) balance has drastically changed, reflecting a major feature of the Japanese economy in the 1970s, that is, a sharp reduction in the underlying growth rate of real GNP from about 10 percent during Stage II to about 4-5 percent during Stage III. Corresponding to the reduced underlying growth rate of real GNP, the excess of corporate investments over savings relative to GNP declined by nearly 3 percent of GNP from 1970-73 to 1981-82, while households' excess savings over investment somewhat increased relative to GNP during the same period. As a result, the private sector as a whole (corporate and household) generated excess savings. In correspondence to such newly emerged excess private savings, the general government (including the general account of both central and local government and social security account) registered a deterioration in its I-S balance by more than 4 percent of GNP from a surplus in 1970-73 to a relatively large deficit in 1981-82 (Table 2). During the same period, the deficit of the foreign sector, namely the surplus of Japan's current account, declined by nearly 1 percent due mainly to the aftermath of oil deficits in the current account under OPEC II. In other words, the excess private savings which were

generated mainly by the decline in the GNP ratio of private expenditure on plant and equipment have been more or less offset by the increase in the ratio of the general government deficit to GNP, without much affecting the GNP ratio of the current account surplus which had already emerged, as mentioned earlier, during Stage II.

Despite the substantial increase in the GNP ratio of the budgetary deficit from the early 1970s to the early 1980s there has been no acceleration of domestic inflation measured by GNP deflator or crowding-out of private capital formation through high real interest rates. This is because the general government deficit increased only to the extent of the excess private savings generated by the lower private investment ratio. Thus, the large government deficit has played two roles during Stage III: it has kept the Japanese economy close to high employment output by absorbing the newly generated excess private savings; and it has kept the current account surplus in nominal terms approximately at the same ratio to GNP after each oil crisis, as in Stage II. In sum, the high-employment government deficit and the high-employment current account surplus have coincided in Stage III, except for the periods immediately after two oil crises.

What was the mechanism for restoring an international creditor position after each oil crisis pushed up the country's oil import bills by more than 4 percent of GNP?

A major feature of Japan's current account development between 1972 and 1982 lies in an extreme difference in the growth rate of exports and imports between current and constant prices (Table 3). At current prices, exports of goods and services grew by 15.6 percent a year, and imports by 13.7 percent per annum, resulting in a relatively small cumulative current account surplus relative to GNP during the same period, both in nominal terms. At constant prices, however, the picture changes dramatically. From 1972 to 1982, exports of goods and services at 1975 prices expanded by 11.6 percent a year, in sharp contrast to a mere 2.2 percent annual growth in real imports. In comparison, real GNP grew by 4.0 percent a year during the same period. Therefore, the expansion in the real external surplus contributed nearly one-third (32.4 percent) of the growth of real GNP. And yet, as menioned earlier, there was a surprisingly small cumulative external surplus in relation to cumulative GNP during the same period. The extraordinary expansion in the real external surplus compensated for the worsening of the current account caused by the 43.3 percent (!) deterioration of Japan's terms of trade between 1972 and 1982, equivalent to a real income loss of nearly 10 percent of GNP.

In other words, Japan did not utilize nearly 10 percent of the real GNP it

produced for improving living standards but exported that much for paying off the oil deficits. This was because neither corporations nor households thought that they should finance permanently higher oil bills by borrowing permanently and because both corporations and households produced higher output while they reduced their expenditure on non-oil items as well as on oil, generating extra products for exports. Their behavior was helped both by oil-crises-induced depreciations of the yen and by tighter monetary and fiscal policies, which were aimed at peventing domestic inflation from accelerating under the influence of the oil price hikes.

It is no wonder that the extraordinary expansion in net exports at constant prices through this mechanism caused trade conflict between Japan and its partner countries. What is more relevant here, however, is to understand both the resilience with which the Japanese economy restored its position as an international creditor even after the two oil crises and the persistence with which Japan's current account has remained in surplus in the era of oil crises.

IV. The coexistence of a high-employment government deficit and a high-employment current account surplus

In determining whether the Japanese economy has established itself as a capital exporter on the basis of chronic current account surpluses, we never fail to face the questions of whether the current account surplus is caused by lower domestic demand in Japan and whether such surpluses can be eliminated or reduced by an expansionary fiscal policy. This question can be paraphrased as a question of whether the current account will remain in surplus even when the Japanese economy is at high-employment, namely the question of the existence of the high-employment current account surplus. Of course, this concept of the high-employment current account surplus is analogous to the high-employment government deficit. While the high-employment government deficit is customarily referred to a closed economy, the high-employment current account surplus is bound to be defined for an open economy. The business cycle of the domestic economy causes not only cyclical budget imbalances but also cyclical current account imbalances. In addition to such business cycles, world economic conditions, petroleum price changes and exchange rates also affect the size of the current account imbalance. Hence, the high-employment current account surplus should be defined as the surplus to be generated when not only domestic output but also world trade, foreign output, and exchange rates return to normal or natural levels. It is almost impossible, however, to assume a normal or natural level of the petroleum price. In the case of the petroleum prices,

therefore, we should take the current price and measure the size of the high-employment surplus which exists after the economy has largely completed its adjustment to changes in petroleum prices.

Bearing these qualifications in mind, let us examine the nature of Japan's current account surpluses in 1977-78 and 1982-83. By 1977-78 and 1982-83, the Japanese economy had more or less completed its adjustments to the increases after OPEC I and II, respectively.

Our estimates (EPA, 1983) indicate that the high-employment external surplus accounted for about 0.8 percent of high-employment GNP in 1977-78 on average (Table 4).

These estimates are based on an open macro model of the Japanese economy for the period 1965-81, where world trade and exchange rates are treated as exogenous variables. In 1977-78, the high-employment government deficits were about 2.2 percent of high-employment GNP.

The high-employment current account for 1982-83 is difficult to estimate by the use of the above Japanese model because the world economic situation and exchange rates were far from normal or natural levels. However, judging from multiplier simulations using the EPA World Econometric Model (1984) and a study (Hooper and Tyron, 1984) based on the MCM (Multi-country Model), we can say that the *actual* external surplus of Japan in 1982-83, which accounted for 1.4 percent of GNP, was influenced by two partly conflicting factors — the overvalued dollar and the state of the international business cycle.

The overvalued US dollar (i.e., the undervalued yen as its counterpart) naturally tended to produce larger surpluses for Japan. If we suppose that the overvalued US dollar was caused by the macro policy mix of easy fiscal and non-accommodating monetary policy in the United States, then the EPA multiplier simulations indicate that bond-financed fiscal expansion in the U.S. equivalent to 1 percent of GNP generates an extra $2.6 billions for Japan's current account surplus on average in the second and third years after the initial impact (the scale of 1982-83 figures is 1.5 times as large as in the EPA multiplier for 1967-77). Assuming that fiscal expansion was about 2.5 percent of GNP, judging from the increase in the US high-employment government deficit between 1981 and 1983 (Leeuw and Holloway, 1983), we arrive at a figure of about $9.7 billion as the total addition to Japan's current account surplus attributable to the particular policy mix adopted in the United States at that time.

The other factor which may or may not raise the high-employment current surplus of Japan was the international business cycle in 1982-83, including its own business cycle. According to the previously mentioned study based on the MCM, the GNP gap between actual and trend output

was larger for the United States, West Germany and Britain than for Japan because these countries had suffered three years of stagnant output in the 1980-82 recession, whereas Japan had experienced only a minor recession. Therefore, if this GNP gap narrowed and actual GNP returned to its trend growth rate in major countries (4.0 percent per annum for Japan and 2.5 percent for others), the resultant higher level of world trade would enhance the high-employment surplus of Japan. If the United States, West Germany and Britain each expanded fiscal expenditure equivalent to 3 percent of GNP to fill their own GNP gap, Japan's current account would improve by $13.5 billion, whereas if Japan expanded fiscal expenditure by 1 percent of GNP in order to narrow its GNP gap, its current account would worsen by $2.4 billion. The net result would be an increase of Japan's external surplus of about 9.5 billion.

Thus, the impact on Japan's external surplus of the aforementioned two forces should largely offset each other. Consequently, the actual GNP ratio of the current account surplus in 1982-83 (about 1.4 percent) must be close to the high-employment current account surplus of Japan. A broad conclusion to be drawn from the above observations is that Japan's high-employment current account surplus will range from 1 percent to 1.5 percent of GNP, which is equivalent to a net surplus of $12-18 billion compared with the $1.2 trillion GNP in 1982-83.

By employing the sectoral I-S balance, we can summarize as follows with regard to the existence of Japan's high-employment external surplus. The period from the early 1970s to the early 1980s is Stage III in the evolution of Japan's balance of payments after World War II, in which Japan has become a capital exporter in terms of both flow and stock. During this Stage III, while the excess of households' savings over investment remained largely unchanged at the order of 10 percent of GNP, the excess of corporate investment over savings declined from about 9 percent to 6 percent of GNP. As a result, excess savings emerged in the private sector as a whole. The decline in the excess of corporate investment over savings was attributed to a larger decline in its investment than in its savings, which corresponded to a substantial slowdown in the growth rate of real GNP from high (10 percent per annum) to medium (4-5 percent per annum). During the same Stage III, the high-employment imbalance of the general government has changed from a surplus of about 1 percent of GNP to a deficit of 3 percent of GNP. In other words, the newly emerged excess savings of the private sector were absorbed by the growth of the budget deficit, with little change in the underlying current account surplus. In the present Japanese economy, therefore, the high-employment current account surplus coexists with the high-employment government deficit.

V. Domestic pressures for liberalization of the Japanese financial market

Two salient features have emerged from the decline in the corporate investment ratio to GNP and also from the high-employment government deficit. First, the corporate sector's demand for loanable funds has substantially slowed down, resulting both in a higher proportion of corporate retained income to corporate fixed capital formation (from 33.8 percent in 1970 to 76.8 percent in 1984 for all industries) and in the greater availability of idle funds to be invested in financial assets by productive enterprises. More than one-fifth of total non-financial corporate income is now earned from investment in financial assets. Second, the central government has issued national bonds in a massive amount every year since 1975, to finance its annual deficit accounting for 4-6 percent of GNP. Though the size of the high-employment deficit of the central government alone is about 5 percent of GNP in the early 1980s, actual deficits have often been larger, reflecting not only the high-employment deficit but also cyclical ones.

National bonds have quickly accumulated in the balance sheet of financial institutions, which are still forced to subscribe to new national bonds in the primary market when their face value is set at a higher level than the market value in the secondary market (i.e., the over-par condition). Faced with accumulated large amounts of national bonds, financial institutions rightly wanted freely to sell national bonds in the secondary market in order to benefit from better portfolio management. In 1977, the Ministry of Finance (MOF), which had hitherto banned sales of national bonds by financial institutions, allowed them to sell national bonds in the secondary market, but only after the minimum holding period of one year after their subscription. Subsequently, the minimum holding period was successively reduced to three months in April 1981. Once interest rates on national bonds were liberalized in the secondary market through their free transactions by financial institutions, it was quite natural that issue rates on new national bonds should be determined in a more flexible manner by the MOF because of an increasing reluctance on the part of financial institutions, led by large city commercial banks, to take up new national bonds under the over-par condition.

At the same time, more varieties of national bonds in terms of maturity have become available in the following two forms. One is issues of medium-term national bonds (2-4 years) through open bids. They were issued for the first time in 1978. The other is the shortening of the remaining maturity of outstanding national bonds in the secondary market.

Since 10-year maturity national bonds started to be issued massively in 1975, the remaining maturity of some of the outstanding national bonds has become very short recently, thus producing *de facto* a free short-term government securities market. Now that outstanding national bonds account for 40 percent of GNP, national bonds with short remaining maturities are abundantly available in the secondary security market.

Furthermore, starting from 1985, the MOF has to redeem and refinance maturing national bonds on top of financing large annual deficits. In order for the MOF to do so without greatly disturbing the capital market even temporarily, it will have to issue new short-term government securities or Treasury bills as "bridging funds" for the gap in timing between redemption and refinancing. Issue rates on new Treasury bills are at present regulated at levels lower than the official discount rate, so that the Bank of Japan has been the sole subscriber of such Treasury bills. Currently, Treasury bills are issued for satisfying the following three financial requirements: (1) the foreign exhange account for the monetary authorities' intervention in the foreign exchange market; (2) the special food account for procurement of rice, and (3) the temporary shortage of funds in the general account of the central government (but to be redeemed within a given fiscal year). Under the new financial requirements of the MOF for the redemption and refinance of the maturing bonds in a massive amount, the MOF will be pressed to liberalize subscribers' yield on short-term governments to to be newly issued so as to let the market absorb them without frustrating the central banks' monetary management.

The availability of government bonds, both short and long, carrying market-determined interest rates has encouraged financial innovations; financial institutions now seek to attract savings through offering higher interest rates than regulated deposit rates of the commerical banking system and postal offices. While commercial banks have been allowed to raise funds through the Gensaki market, issues of short-term certificates of deposit (CDs) and offering foreign currency deposits since 1978-80, security houses introduced the medium-term national bond fund in 1980 which can be freely drawn by customers after the minimum investing period of 6 months and carries interest rates higher than time deposit rates in commercial banks. In the same year, trust banks and long-term credit banks also introduced financial assets for household customers called "big" or "wide" which carry higher interest rates than regulated time deposit rates through investing in national bonds in the secondary market.

The Gensaki is a short-term transaction of long-term government bonds with repurchase agreements and carries market-determined interest rates. Securities houses and commercial banks utilize the Gensaki

for raising short-term funds, while non-financial corporations invest their idle funds in the Gensaki whose interest rates are higher than regulated interest rates on time deposits of the same maturity. In 1979, the MOF removed restrictions on banks' participation in the Gensaki market and also introduced bank CDs. At the same time, the Bank of Japan lifted administrative controls on call rates and bill rates in the interbank money markets during 1978-81. These important institutional changes have facilitated the integration of the interbank money markets with short-term security markets of the Gensaki, CDs and short-term national bonds with short remaining maturities. Furthermore, in 1980, foreign currency deposits were allowed by the MOF to be introduced to the commercial banking system, in which particularly resident enterprises can make investment to enjoy higher returns than regulated domestic time deposit rates without foreign exchange risks, since forward exchange contracts are used for hedging.

On top of these developments in the Japanese financial market, the pressure to liberalize newly issued short-term government securities or Treasury bill rates has been mounting very rapidly, as mentioned earlier. Once this is achieved, the open money market or the open short-term capital market will rapidly develop, simply because short-term government securities or Treasury bills are the most convenient financial instrument for residents and non-residents as well as for open market operations by the Bank of Japan.

Short-term government securities or Treasury bills bearing market-determined interest rates are likely to be the financial instrument most competitive to bank deposits in the banking sector. Envisaging the possible introduction of such short-term government securities or Treasury bills very soon, commercial banks now want to have hitherto regulated deposit rates liberalized in order to avoid unfavorable financial disintermediation which would be caused by the development of the open money market if deposit rates remained regulated.

VI. Transition from the bank credit control to the open money market paradigm

These pressures for the liberalization of interest rates have been pushing the Japanese financial system from the bank credit-control paradigm to the market-determined open money market paradigm. In terms of Modigliani-Papademos (1980) the bank credit paradigm refers to the financial system in which the non-bank public, mainly the corporate sector, raises its necessary funds almost entirely from the banking system. By contrast, in the open money market paradigm, the non-bank public raises

its necessary funds in the capital market by relying substantially on marketable instruments held directly by the public or by non-bank financial intermediaries. In order for the central bank to manage the money supply, it will control bank credit in a bank credit paradigm economy, whereas it will conduct open market operations in a money paradigm economy.

Under the bank credit-control system the demand and supply of bank loans are equilibrated by credit rationing at regulated loan rates, which are lower than would-be market rates. Such regulated bank loan rates are also naturally linked to regulated deposit rates in the banking sector. Given inflexible deposit rates, the banking sector fully accommodates the demand for bank deposits by the non-bank public. This bank credit-control paradigm exactly describes the Japanese financial system under the high growth period, i.e., until the end of Stage II in the evolution of Japan's balance of payments.

In the bank credit-control paradigm, the interbank money market is closely controlled through the discount window of the Bank of Japan. This is because, when commercial banks short in cash or reserves have to resort to the discount window after having satisfied part of their demand for reserves, the central bank's credit has to be rationed, since the official discount rate is lower than interbank money market rates such as call rates and bill rates. In the bank credit paradigm, only commercial banks (and the central bank) are allowed to participate in the interbank money market. Non-bank public and non-bank financial intermediaries are not permitted to do so. These institutional arrangements leave room for maneuvering interbank money market rates through administrative guidance by the Bank of Japan. By contrast, in the open money market paradigm, non-bank financial institutions, productive corporations and other economic agents are permitted to participate in the interbank money market, which is, therefore, integrated with the short-term securities market through arbitrage transactions.

During the high growth period to the early 1970s, an excess of investment over savings in the corporate sector was thus financed mainly through the banking sector (the so-called "overloan" phenomenon in Japan), which in turn accepted savings from the household sector mainly in the form of time deposits. Both bank loan rates and deposit rates were regulated, as mentioned earlier, at levels lower than market-clearing rates, for the purpose of promoting manufacturing industries through providing cheap funds. Since stock dividends (unlike interest payments) were not deductible from corporate income taxes, after-tax costs of borrowing through the banking sector were cheaper for the corporate sector than issuing corporate stocks. Consequently, productive corporations were

induced to borrow excessively from the commercial banks (the so-called "overborrowing" phenomenon in Japan). Issue rates on corporate bonds were also regulated at lower levels in the primary market than in the secondary market, and, therefore, new corporate bonds were to be rationed too. As a result, the corporate bond market remained underdeveloped during the high growth period.

Long-term credit banks (three such banks exist in Japan) and governmental financial institutions also played a very important role in promoting economic growth through providing industries with cheap long-term credits. To obtain their lending resources, only long-term credit banks were (and still are) allowed to issue medium-term bank debentures, the issue rates on which were also set at lower levels in the primary than in the secondary market. The bulk of the new bank debentures were subscribed to by commercial banks, and so were new corporate bonds. Long-term credit banks could, therefore, afford to provide long-term loans at cheap rates to manufacturing industries, in particular for capital-intensive, long-gestation industrial projects. Japan's Security Transaction Law of 1948, which is patterned after the US Banking Act of 1933 (the Glass-Steagal Act) prohibits dealing in and underwriting of securities by banks except for public securities. In many instances, however, long-term credit banks have functioned as lead managers or co-managers in loan syndicates, whereby they effectively underwrite a large industrial project (Sakakibara,).

The main bank system

In addition, long-term credit banks in cooperation with securities houses act as *de facto* underwriters of corporate bond issues which issuing corporations are requested to back up by collateral. At the same time, the so-called main bank system takes care of an enterprise in financial difficulties in order to avoid defaults on the corporate bonds issued by the enterprise. In fact, since World War II, there has not been a single case of default on corporate bonds of any enterprise because of the help of the main commercial bank which holds the highest share of bank loans to that enterprise. Significantly, under the Bank Transaction Clause (Article 4) banks can request an enterprise to back up bank loans extended to that enterprise by collateral in case of financial difficulty. Because of this Article 4 banks can afford to extend and roll over short-term loans to enterprises without collateral in normal circumstances. All in all, the *de facto* underwriting of long-term credit banks, the collateral principle for corporate bonds and the main bank system have allowed the Japanese financial system to diversify and to pool risk in an implicit but efficient

manner, particularly when heavy industries were promoted by the government (Stage I of the evolution of Japan's balance of payments).

Government financial institutions further helped to pool and diversify risks in favor of savers, through providing subsidized loans to the construction of physical infrastructure including ports, highways and housing as well as to strategic industries (e.g., electricity, shipping, coal and steel in the 1950s) and small-scale private enterprises. The Fiscal Loan and Investment Program (FLIP) under the Ministry of Finance, through which government financial institutions provided such long-term subsidized loans, was (and is) financed largely by postal savings and welfare pension conributions collected by postal offices under the Ministry of Posts and Telecommunications. Postal saving rates were (and are) regulated essentially along the line of bank deposit rates.

Without the introduction of foreign exchange controls, the bank-credit control paradigm would not have been complete, nor could it have survived. This is simply because domestic savings would have leaked out into foreign countries instead of being bottled up for supporting domestic investment. During the high growth period, therefore, strong foreign exchange controls were exercised by the Ministry of Finance. Only after the economy began to register current account surpluses in 1965 were foreign exchange controls over imports gradually deregulated. However, foreign exchange controls over international portfolio investment and loans were liberalized only in the 1970s, namely, in Stage III of the evolution of Japan's balance of payments.

The high growth of the economy produced large revenues and comfortable budget balance for the Ministry of Finance. An ambitious counter-cyclical Keynesian policy was not undertaken, because such a policy was unnecessary thanks to the "relatively shallow" growth recessions. During the high growth period, the general government registered surpluses, i.e., an excess of savings over investment (only after 1966 did the central government begin to issue national bonds on a small scale) so that the Bank of Japan repurchased essentially all of the national bonds which financial institutions had been forced to subscribe to in the primary market. It goes without saying that subscribers' yields on new national bonds were regulated at lower levels than comparable market rates.

Since OPEC I, namely in Stage III of the balance-of-payments evolution in Japan, macroeconomic forces have facilitated a rapid shift of the Japanese financial system. An open money market paradigm is characterized by a well-developed capital market as well as an open market through which the central bank can conduct open market operations in

order to manage the money supply. By the nature of the open money market paradigm, interest rates are market-determined in both primary and secondary securities markets and maturities of bonds should be well diversified. Interest arbitrage transactions can be very active not only between various financial investments with similar maturities such as between the interbank and the open money market, but also among bonds with different maturities, producing the market-determined term structure of interest rates or the yield curve in accordance with the phase of the business cycle and inflationary expectations.

The key macroeconomic force pushing the Japanese financial system toward the open money market paradigm is the coexistence of the high-employment government deficit and the high-employment current account surplus, reflecting the emergence of an excess of savings over investment in the private sector as a whole.

VII. Internationalization of the Japanese financial market

Though the Japanese financial system is clearly shifting from the bank credit-control paradigm to the market-determining money paradigm, there still remain regulations which are carried over from the old days. For instance, bank and postal saving rates are regulated together with issue rates on new national bonds and bank debentures of long-term credit banks. The long-term prime rates are set at the level of issue rates of bank debentures plus a constant spread of 0.9 percentage points. Not only long-term credit banks but also trust banks and government financial institutions utilize such long-term prime rates for their respective lending rates. There are still distinct segmentations among various financial institutions, say, between long-term credit banks and ordinary commercial banks, to say nothing of the barriers between banks and securities houses. As mentioned earlier, market pressures are mounting for the emergence of a genuine money market economy. Such pressures include the internationalization pressure on the Japanese financial market.*

The persistence of the current account surplus has no doubt contributed to deregulation of foreign exchange controls over international capital movements. Unfortunately, however, two oil crises and the emergence of embarrassingly large current account surpluses after each oil crisis greatly disturbed the liberalization of foreign exchange controls in Stage III of the balance-of-payments evolution.

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* These market pressures are described in *Hamish McCrae: Japan's Role in the Emerging Global Securities Market*, Group of Thirty, Occasional Paper No. 17, New York, 1985.

Exchange controls

When OPEC oil price hikes in 1973-74 and 1979-80 generated huge oil deficits in Japan's current account, the authorities were greatly concerned with how to finance such deficits, particularly in the case of OPEC I. The authorities encouraged inflows of capital, while strengthening foreign exchange controls over outflows of capital through, say, the introduction in 1974 of both voluntary constraints on net increases in overseas investment by resident financial institutions and a ban on residents' purchases of short-term assets denominated in foreign currency. Once the current account situation improved, the authorities lifted such temporary exchange controls (mid-1977). Surprised at increasingly larger current account surpluses, however, the authorities then promptly reversed course by introducing foreign exchange regulations against inflows of foreign capital and encouraging outflows of home capital. For instance, purchases of yen-denominated bonds by non-residents were banned, and required reserve ratios on free yen deposits by non-residents were introduced and raised in the course of 1978. These policy measures were aimed at preventing too rapid an appreciation of the yen and its overshooting. After November 1978, the exchange rate relationship among major currencies began to normalize, and in 1979 the authorities removed exchange regulations introduced in the previous year. Although disturbed again by the second oil crisis, the Japanese economy was much better managed under OPEC II in terms of domestic inflation and business fluctuation, contributing to the continued ease of the authorities' attitude toward foreign exchange controls. The yen began to appreciate in April 1980 from the OPEC II-induced undervaluation, reflecting a rapid disappearance of oil deficits in the current account.

However, high interest rates in the United States reversed the appreciating trend of the yen, and since then the yen has remained undervalued vis à vis the US dollar, though the yen has been aligned with, or somewhat even overvalued vis à vis, the DM.

Because of the Japanese authorities' great concern over the growth of protectionist sentiment in the United States, the MOF attempted to curb a further depreciation of the yen and the increase of the current account surplus. In 1982, the MOF banned residents' purchases of zero-coupon foreign bonds and introduced administrative guidance in 1982 requesting institutional investors to slowdown their investment in US bonds. Both of these were then removed or mitigated in 1983 in view of the reversal of the yen from depreciation to appreciation. The same considerations have made the Bank of Japan very reluctant to reduce the official discount rate, despite increasingly lower domestic inflation rates, resulting in high real

interest rates in the Japanese financial market too as in the United States.

The above brief description of a history of foreign exchange administration over the past ten years indicates that in Stage III of the balance-of-payments development there has been a clear trend toward deregulation of foreign exchange controls but that this underlying trend was occasionally disturbed both by oil deficits and by large surpluses afterwards. Hence, in December 1980, formal exchange controls were dropped through a *de jure* recognition of the underlying progress of *de facto* deregulation in the 1970s.

There are three fundamental aspects of the internationalization of the Japanese financial market. First is the liberalization of foreign exchange controls whereby both residents and non-residents freely participate in transactions in the foreign exchange market. As described above, this liberalization is nearly complete. Second is the liberalization of domestic interest rates and related freer usage of the euro-yen markets by both residents and non-residents.Third is the weakening of the barriers between commercial banks, long-term credit banks, securities houses, trust banks, etc. The last two aspects of the internationalization of the Japanese financial market are closely related to each other.

Impact of agreements with the United States

At the end of May 1984, the so-called Japan-US Yen-Dollar Committee completed a report on the liberalization and internationalization of the Japanese financial market. Although this committee was established at the time of President Reagan's visit to Tokyo in November 1983 for the purpose of correcting the misaligned dollar-yen exchange rate, negotiations between the U.S. Treasury and the MOF centered upon internationalization of the Japanese financial market. This was justified by the proposition that the internationalization of the yen should strengthen the value of the yen through non-residents' greater demand for the yen in the long-run, though the liberalization of the Japanese financial market would exacerbate the misaligned dollar-yen exchange rate under the present circumstances of high U.S. interest rates.

Agreements reached by the Yen-Dollar Committee centered essentially on the liberalization of the use of the euro-yen by both residents and non-residents. First is the free access to the euro-yen bond market for fund raising. The number of eligible resident corporations which are allowed to issue euro-yen straight and convertible bonds has already been increased since April 1984. These corporations account for 70-80 percent of the amount of issuance of straight bonds and 40-60 percent of convertible bonds in the domestic market. Furthermore, issues of euro-yen

bonds by non-residents were limited to foreign public institutions but have been liberalized for foreign private companies effective December 1984. Second, euro-yen loans with maturities of one year or less were liberalized for residents effective June 1984. Such short-term euro-yen loans have already been liberalized for non-residents since June 1983. Liberalization of long-term euro-yen loans became effective in April, 1985. Third, issues of euro-yen CDs, very short (less than one month), short (1-6 months) and mediurn, were liberalized in December 1984, under the condition that such euro-yen CDs should not be sold to residents.

The liberalization of these euro-yen transactions, particularly in the case of long-term euro-yen loans and bonds will erode the barriers or segmentations between domestic financial institutions. This is because if resident and non-resident corporations which would otherwise raise their necessary long-term funds through long-term credit banks, now turn to the euro-yen bond market or euro-yen medium loans, long-term credit banks will face much tougher competition, lose customers and be pressed to diversify their portfolios.

The liberalization of the euro-yen market will also contribute to the deregulation of domestic issue rate controls. Since a much larger number of domestic corporations have access to euro-yen bond markets where issue rates are market-determined, there will also be pressure to liberalize issue rates on corporate bonds in the domestic primary market. In addition, as issues of euro-yen bonds are liberalized for non-residents, various regulations imposed on Samurai bonds (yen-denominated foreign bonds issued in Tokyo) will also be pressed for liberalization, simply because euro-yen bonds are substitutable for Samurai bonds.

Still another important implication of the liberalized euro-yen bond issues and loans will be the possible alteration of the collateral principle and the main bank system. As compared with domestic requirements that corporate bonds should be supported by collateral or on a secured basis, resident corporations do not have to back their euro-yen bonds by collateral, thus virtually liberalizing the collateral principle, which is somewhat peculiar to the Japanese system. The liberalization of euro-yen loans may also reduce the importance of the main bank system.

Another important agreement reached by the Yen-Dollar Committee was the aforementioned liberalization of issues of euro-yen CDs and the removal of regulated limits on oversold spot foreign exchange positions of banks (so-called swap limits on the conversion of foreign currency into yen). In this context the Yen-Dollar Committee report stated that the banks will be permitted to sell new types of large denomination deposit instruments with market-determined interest rates by April 1985. The MOF

would remove interest rate ceilings on large denomination deposits in 2 to 3 years, then moving to interest rates on smaller deposits. This agreement will allow banks freely to take in yen deposits at market interest rates, and therefore, facilitate the liberalization of domestic bank deposit rates, which have already been pressed for deregulation through the development of the *de facto* open money market in CDs, RPs (the Gensaki), and national bonds with remaining short maturities, as described earlier. Furthermore, the present regulation on interbank deposit rates may become useless, since banks will be able freely to take in euro-yen foreign currencies and convert them to yen in order to satisfy domestic bank loan demand and shortages in reserves, jeopardizing the window guidance over domestic credits exercised by the Bank of Japan.

Finally, the agreements reached by the Yen-Dollar Committee include, as a study subject, the liberalization of issue rates on short-term government securities or TBs and the establishment of a yen-denominated BA (bankers acceptance) market. This agreement will be most important for the internationalization of the yen. This is because if the yen becomes one of the key currencies, the Japanese economy will "borrow short and lend long" as an international financial intermediary like Britain and the United States in their heyday. "Borrowing short" denotes investments by non-residents in yen-denominated short-term assets whereby they can hold international liquidity. Japanese short-term government securities or TBs are the best financial instrument for such type of yen usage by non-residents. At present, however, issue rates on TBs are regulated at levels lower than the official discount rate and, therefore, the TB market is underdeveloped. As mentioned earlier, the domestic necessities of the redemption and refinance of matured national bonds will work as a strong force for the liberalization of issue rates on short-term government securities or TBs. The establishment of BA (banker acceptance) market will also help the internationalzation of the yen.

The establishment of short-term government securities or TB and BA markets together with the decontrol of interbank deposit rates will complete the open money market paradigm in Japan.

VIII. Policy problems facing Japan as a capital exporter

Given the likely continuation of the coexistence of the high-employment government deficit and the high-employment current account surplus in Japan, new policy questions will face both the Japanese and the foreign authorities. First is the question of whether domestic macroeconomic policy should be aimed at reducing the large current account surplus. Second is the question of the relationship between the high-employment

current account surplus and trade frictions. Third is how the liberalization and internationalization of the Japanese financial market and its full integration with the international capital market will affect monetary policy and the management of the national debt.

Macro-economic policy —

With regard to macroeconomic policies, both foreign authorities and domestic Keynesians tend to advocate an expansionary fiscal policy just because of the existence of a current account surplus which is, in their view, a reflection of insufficient domestic demand. The fundamental problem involved in this question is that there can be different causes of a current account imbalance. If the exchange rates among major currencies are extremely misaligned by the criterion of the PPP for tradeable goods, large current account imbalances will emerge. For instance, Japan's large current account surpluses in 1971-72 reflected the undervalued exchange rate of the yen under the adjustable-peg Bretton Woods system. It goes without saying that in the past few years exchange rates have been abnormally misaligned between the US dollar and other major currencies. Changes in prices of imported petroleum also no doubt influence the size of the current account imbalance. More importantly, the different ways in which various countries adjust greatly affect the subsequent current account development of each country, as discussed for the case of Japan earlier in this paper. Furthermore, the stage of economic development and related balance-of-payments evolution should determine whether a country is a capital importer or a capital exporter.

However, what is more relevant to the question of macroeconomic policies is cyclical current account imbalances attributable to domestic demand conditions. Two issues are involved — domestic and international. As to the domestic issue, it is necessary to distinguish between cyclical and non-cyclical components of the current account imbalance. If we allow for the existence of the high-employment current account imbalance of an economy at a certain stage of its economic and balance-of-payments development, it is inappropriate just to employ macropolicies to remove such current account imbalances. Therefore, if macroeconomic policy should be assigned to remove a current account imbalance, it should not attempt to eliminate the whole imbalance but just the cyclical components.

In addition, the international business cycle also influences the peripheral part of the imbalance, somewhat blurring the issue of whether the current account surplus (beyond the core part attributable to a fundamental excess of savings) is attributable to domestic demand

condition or to the international business cycle. The best example of this is the U.S. deficit and Japan's surplus in the current account in 1984-85. Each imbalance will account for 2.5 - 3.0 percent of GNP — undoubtedly too large. A compromise policy recommendation would be to reduce the U.S. deficit by cutting down its fiscal deficit, on the one hand, and to reduce Japan's surplus be expanding its government deficit, on the other. Such a suggestion, however, may be risky, if the peripheral part of Japan's current account surplus is simply a counterpart of the large U.S. current account deficit attributable to its fiscal policy-led strong recovery. For example, the EPA World Econometric Model indicates that a sustained expansionary fiscal policy in the United States equivalent to 1 percent of GNP improves Japan's current account by $2.8 billion and $5.8 billion in the second and third years respectively, after its initial policy shock. If the U.S. fiscal expansion is assumed to be equivalent to 2.5 percent of its GNP as mentioned earlier, the bulk of the peripheral part of Japan's surplus can be accounted for by U.S. fiscal policy. If so, international policy coordination requires that Japan's fiscal policy should be expansionary in order to reduce its large surplus, *if* and *only if* U.S. fiscal policy becomes less expansionary and the Japanese economy is hit very adversely.

Hence, the existence of the current account surplus of Japan does not necessarily imply that it is attributable to weaker domestic demand and that its macro policy should be expansionary. Policymakers, domestic as well as abroad, should be obliged to judge whether the size of the existing surplus is larger or smaller than the high-employment current account surplus and what the basic causes of the peripheral part of the current surplus are.

— *trade frictions*

The second question is about a relationship between Japan's chronic current account surplus and continuing trade frictions.

Theoretically, the existence of the high-employment current account surplus *per se* will not cause continuing trade frictions between Japan and its partner countries. The existence of the chronic surplus does not mean an expanding surplus but a rather constant surplus in relation to GNP. In other words, exports and imports will grow parallel to each other on a cyclically adjusted basis. If the main cause of trade conflicts is the importation of unemployment due to an expanding deficit in the current account of trading partners as a counterpart of an expanding surplus of Japan, then the question is not the existence of the chronic surplus but the expanding net exports of Japan. In addition, it is important to note that such rising net exports should be measured in real terms because a rising unemployment in trading partner countries should be attributable to their

lower real output due to an excess of real imports over real exports.

In fact, during each of all three periods when Japan experienced serious trade frictions (1970-72, 1977-78, 1981-84), Japan's real exports expanded more rapidly than its real imports, but for different reasons. As discussed already, the bulk of the expanded net exports in real terms during 1973-82 compensated for large nominal oil deficits in the current account and restored Japan's position as a capital exporter after the oil crises. The resultant cumulative surplus was small during the same period, but trade frictions were serious.

It is, therefore, wrong to assert that continuing trade frictions are built into the high-employment current account surplus of Japan.

There is a related but different issue regarding trade conflicts. When a national economy grows very fast, its real exports will expand more rapidly than the slow-growing domestic market of trading partner countries. The resulant increasingly higher share of products of the fast-growing country tends to cause trade conflicts, despite the possibly parallel growth of exports and imports of the country. Theoretically, however, trading partner countries as a whole must be enjoying faster expansion in their exports to the fast-growing economy than in their domestic sales.

This issue leads us to a question of how trading partner countries can make economic adjustments to rising imports from fast-growing countries, namely positive or negative adjustment policies. In this context, it is worth mentioning that trade barriers imposed by trading partners on one sector of Japan's exports for the purpose of mitigating hardship inevitably involved in such structural adjustments are bound to cause other export sectors to expand even faster to generate the high-employment current account surplus which should correspond to high-employment savings-investment equilibrium in Japan.

It is all the more important for Japan as capital exporter to further open its import markets which are already as open as other major industrial countries as mentioned in Section II. This is because a country like Japan with chronic current account surpluses is in a better position to further liberalize import barriers than a country with current account deficits and because international capital mobility can contribute to better allocation of resources in the world economy when free international trade is well maintained.

— *monetary policy*

A third policy problem or challenge for Japan as a capital exporter is the conduct of monetary policy and national debt management.

As discussed in Section VI, the Japanese financial system is shifting

from a bank credit control to an open money market paradigm. This shift has to change the way of conducting monetary policies in Japan, away from the window guidance type of bank credit control to open market operations. The former paradigm is based on administered interest rates in the banking system and in the primary market of securities, whereas in the latter paradigm, interest rates as well as issue rates are market-determined. Monetary policies are targeted at the money supply, either implicitly under the bank credit control paradigm or explicitly under the open money market paradigm. During the high growth period, the money supply was managed through rationing bank credit control by the Bank of Japan. Since having experienced the excess supply of money and rapid inflation in the early 1970s, the target has been set explicitly at the money supply (M2) which is managed through a combination of rationing bank credit and open market operations. Once the shift to the open money market paradigm is completed through the introduction of the short-term government security or Treasury bill market and the related liberalization of interest rates, open market operations will become the most important instrument for money supply management.

The liberalization and internationalization of the Japanese financial system will produce the following three fundamental problems for financial policies. First, there will be increasing difficulties in money supply management in the new financial environment because of the increasing obscurity of the concept of money. Second, it is arguable whether domestic monetary policy can be independent in an integrated world capital market. Third, there is the problem of how to secure the banking system from financial panic after the abolition of the traditional main bank system.

Regarding the concept of money, the Bank of Japan has been using the broad money, i.e., M2 + CDs since the introduction of CDs in 1977. The reason for including CDs in the broad money supply is the high substitution between time deposits and CDs. The introduction of the short-term government security or TB market and the establishment of the open money market where non-financial corporations will be permitted to participate will certainly widen the scope of portfolio selections by productive enterprises and households. As a result, more varieties of market-interest-bearing liquid assets may have to be included in the definition of broad money, increasingly blurring the distinction between transaction money and liquid assets. This rather traditional problem will be reduced by introducing the *divisia* index of money. The *divisia* index of money is liquid assets weighted by interest rates. The higher the interest rate the liquid asset bears, the lower weight the asset is given.

So far as the new financial paradigm does not produce interest-bearing demand deposits, the core concept of money, that is, currency plus demand deposits (M1) can be well maintained. However, once demand deposits begin to bear market interest rates, as in the United States, the supply of M1 will not be demand-determined any more. This is because the supply of M1 by commercial banks will be influenced also by interest rates on demand deposits. An increase in the supply of demand deposits will become associated with higher rather than lower interest rates. The higher interest rate on demand deposits will attract funds into the commercial banking system, ending up with a greater quantity of money (deposits) and a higher interest rate. This will, therefore, complicate money supply management by the Bank of Japan, since the short-run relationship between interest rates and the money supply could be reversed.

By contrast, the internationalization of the Japanese financial market will not significantly complicate the concept of money. At present, yen deposits by non-residents and foreign currency deposits by residents are already included in the money supply.

Freer borrowing of foreign currency and euro-yen credits by commercial banks will make it difficult for the Bank of Japan to control dollar bank credit through the traditional window guidance. However, the complete shift toward the open money market paradigm will make it possible for the Bank of Japan to control the money supply through open market operations. Therefore, the above difficulty in controlling bank credit caused by the internationalization of the Japanese financial system should be a transitory problem during the transitional period from the bank credit control to the open money market paradigm. Of course, the development of the euro-yen market tends to circumvent a tight monetary policy at home, since higher opportunity cost on commercial banks' reserves will shift bank deposits from domestic to euro-yen markets. However, this shift will not preclude the management of the money supply through open market operations.

— *and full integration with the world capital market*

The internationalization of the Japanese financial market and its consequent integration with the international capital market will make it difficult for the Bank of Japan to influence domestic real interest rates independently from the development of world real interest rates, i.e., dollar real interest rates. If long-run inflationary expectations affect long-term nominal interest rates and if international differences in underlying inflationary expectations between the U.S. and Japan affect the expected

rate of depreciation of a currency in the long-run, then the expected rate of return on yen bonds tends to be equal to that on dollar bonds. This is because higher real U.S. interest rates will continue to attract capital from Japan so long as there remains an international difference in the expected rate of return in favor of dollar bonds. This relationship will hold increasingly true since the internationalization of the Japanese financial market enhances the degree of substitutability between yen and dollar bonds.*

If real interest rates tend to be equal between home and foreign capital markets through the internationalization of the Japanese financial market and through the resultant integration of the two capital markets, monetary policies will not be able to influence domestic interest rates in real terms and, therefore, cannot be utilized for demand management purposes.

Finally, the main bank system has played an important role in avoiding the so-called free-rider problem of the commercial banking system, which is the "collective" withdrawal of credits by commercial banks from a financially troubled enterprise. Such withdrawal of loans triggers liquidity problems of the enterprise and aggravates an insolvency problem. In Japan, the main bank continues to extend loans to such financial enterprises, at interest rates lower than ordinary levels, but under very strict "conditionality." This function currently played by the main bank system needs to be maintained.

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* For the long-term asset market equilibrium, $i = \dot{e} + i^*$, where i: home nominal interest rate, i^* = dollar nominal interest rate, i = dollar nominal interest rate and $\dot{e}$ = the expected rate of appreciation of the home currency per the dollar. As noted in the text, if $i = r + \dot{p}$ and $i = r^* + \dot{p}^*$ and if $\dot{e} = \dot{p} - \dot{p}^*$, where r and r^* denote home and dollar *real* interest rate, respectively, and $\dot{p}$ and $\dot{p}^*$ denote home and US inflation rate, respectively, then the equilibrium condition for the asset market should be that $r + \dot{p} = \dot{e} + i^* = (\dot{p} - \dot{p}^*) + (r^* + \dot{p}^*)$, that is $r = r^*$.

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TABLE 1

Summary of Japan's Balance of Payments, 1961-83
(Billions of U.S. dollars)

Year	Current account: Total account	Current account: Investment income: Credits	Current account: Investment income: Debits	Capital account: Long-term capital	Capital account: Short-term capital	Errors and omissions	Changes in external reserves	Proportion of the current imbalance to nominal GNP**
1961	– 1.0	*	0.1	*	0.6	*	0.3	
1962	– 0.1	0.1	0.2	0.2	0.2	*	0.3	
1963	– 0.8	0.1	0.2	0.5	0.3	*	*	
1964	– 0.5	0.1	0.3	0.1	0.3	*	0.1	
1965	0.9	0.2	0.4	– 0.4	–0.4	*	0.1	1.1
1966	0.3	0.2	0.4	– 0.8	–0.4	*	*	1.3
1967	– 0.2	0.3	0.5	– 0.8	0.5	*	*	–0.0
1968	1.1	0.3	0.6	– 0.3	*	*	0.9	0.8
1969	2.1	0.5	0.8	– 0.2	–1.5	0.1	0.6	1.3
1970	2.0	0.7	0.9	– 1.6	–0.7	0.3	0.9	–1.1
1971	5.8	1.0	1.0	– 1.1	5.5	0.5	10.8	–2.6
1972	6.6	1.6	1.3	– 4.5	0.2	0.6	3.1	2.3
1973	– 0.1	2.7	2.2	– 9.8	2.4	–2.5	– 6.1	0.0
1974	– 4.7	3.6	4.0	– 3.9	9.9	*	1.3	–0.9
1975	– 0.7	3.6	3.9	– 0.3	0.8	–0.6	– 0.7	–0.1
1976	3.7	3.5	3.7	– 1.0	1.0	0.1	3.8	–0.7
1977	10.9	3.7	3.6	– 3.2	–2.2	0.7	6.2	1.6
1978	16.5	5.3	4.4	–12.4	5.8	0.3	10.2	1.8
1979	– 8.8	9.0	7.0	–12.6	6.4	2.3	–12.7	–0.8
1980	–10.7	11.1	10.3	2.4	16.4	–3.1	4.9	–0.9
1981	4.8	15.8	16.5	– 6.4	–1.4	0.5	3.2	0.6
1982	6.9	18.3	16.6	–15.0	–1.4	4.7	– 5.1	0.8
1983	20.8	15.6	12.5	–17.7	–3.9	2.1	1.2	1.9

Source: The Bank of Japan, Balance of Payments Monthly.

* Negligible.

** %, on a national account basis.

TABLE 2

Japan's Investment-Saving Imbalances, by Sector, 1970-73 and 1981-82
(Percent of nominal GNP)

Savings and investment	Household		Corporate		Government		Foreign*		Errors and omissions	
	1970–73	1981–82	1970–73	1981–82	1970–73	1981–82	1970–73	1981–82	1970–73	1981–82
Savings (S)	15.8	18.0	16.3	9.7	6.8	3.4	...	...	...	...
Investment (I)	5.6	7.4	25.4	16.2	6.0	7.0	...	...	...	...
S — I	10.2	10.6	–9.1	–6.5	0.8	–3.6	–1.4	–0.7	–0.3	0.2

Source: Economic Planning Agency, Annual Report on National Account, 1984.

* Net flow.

TABLE 3

Japan's Current-Account Surplus and Growth in Gross National Product, 1960-70 and 1973-82
(Percent)

Item	High-growth period (1960-70)		Oil crisis period (1973-82)	
	At 1970 prices	At current prices	At 1975 prices	At current prices
Net exports (average annual growth)	15.5	16.6	11.6	15.6
Net imports (average annual growth)	14.8	15.9	2.2	13.7
Gross national product (average annual growth)	10.8	16.4	4.0	10.2
Contribution of external surplus to cumulative growth of GNP	1.4	1.3	32.4	2.0
Change in terms of trade over period	6.2		–43.3	

Source: Economic Planning Agency, Annual Report on National Income Statistics, 1978, 1982.

TABLE 4

High-employment government deficits and high-employment private I-S gaps
(% of high-employment nominal GNP)

Fiscal year	High-employment government deficit (1)	High-employment excess private savings (2)	High-employment current account imbalance of Japan (3)	(4) = (2) − (3)	(Reference) High-employment rate of unemployment (5)	(Reference) High-employment deficit of the central government (6)
1970	1.83	0.71	1.46	0.75	1.49	0.59
1971	0.65	2.16	2.30	–0.14	1.54	–0.94
1972	0.78	1.41	1.75	–0.35	1.60	–1.01
1973	2.97	–0.65	–1.27	0.62	1.65	0.61
1974	1.49	–1.41	–1.67	0.25	1.71	1.02
1975	–1.36	2.79	–1.36	4.15	1.77	–1.43
1976	–1.35	1.59	–0.37	1.95	1.83	–2.38
1977	–2.41	2.32	0.96	1.36	1.89	–3.33
1978	–2.02	1.44	0.45	0.98	1.96	–3.63
1979	–3.38	0.97	–1.90	2.87	2.03	–4.99
1980	–3.08	1.63	–1.16	2.79	2.10	–4.90
1981	–3.19	2.65	–0.25	2.90	2.17	n.a.

Source: Economic Research Institute, Economic Planning Agency "Reestimation of Full Employment Surplus" 1983.

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